UNCLASSIFIED

NATIONAL IMAGERY TRANSMISSION FORMAT STANDARD (NITFS) REOUEST FOR CHANGE (RFC)

RFC CONTROL NUMBER 97-006

(To be filled in by NTB Secretary)

DATE SUBMITTED 10/30/96 DATE RECEIVED 11/18/96

ORIGINATOR Joint Interoperability Test Command

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ATTN: JTDB

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ORGANIZATION TYPE Government (DoD)

PRIORITY routine

FUNCTION Certification Test Criteria

DOCUMENT NUMBER- JIEO CIRCULAR 9008/30 Jun 1993

PAGE 5-18

DOCUMENT- NITFS CERTIFICATION TEST & EVALUATION PROGRAM PLAN PARAGRAPH 5-12.

PROBLEM DESCRIPTION

Presently, the NITFS standards do not address a specific procedure for drawing CGM line or edge widths, or how to handle a CGM file when start and stop vectors of an arc element fall on top of each other. These proposed changes are to clarify requirements in JIEO 9008.

RECOMMENDED WORDING

SEE ATTACHMENT FOR PROPOSED CHANGES.

RATIONALE

This RFC provides recommended updates to JIEO Circular 9008 to reflect clarification of NITFS certification test criteria/requirements for the interpretation and generation of CGM.

REMARKS

An errata sheet will be inserted into the 30 Jun 93 document. The change will then be incorporated into the next revision of the document.

TOTAL COST OF IMPLEMENTATION	
None	

PROPOSED TIME FRAME OF IMPLEMENTATION

Immediately

ANTICIPATED USER IMPACT

To be determined

NTB REVIEW DATE

NTB RECOMMENDATION

SUBSTANTIVE ISSUES

DATE SUBMITTED TO NTB
NTB REVIEW DATE

NTB CHAIRMAN SIGNATURE

NTB DECISION

IMPLEMENTATION DATE

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NITFS-CCB FORM 1(REVISION 2)

JITC/JTDB 30 OCTOBER 96

REQUEST FOR CHANGE TO JIEO CIRCULAR 9008

RE: Proposed changes to JIEO Circular 9008 clarify CGM requirements.

1. Paragraph 5-12, add subparagraphs E and F as follows:

E. Edge Widths:

- 1. Pack. Systems creating closed CGM elements (polygons, rectangles, circles, ellipses, circular arc closed, and elliptical arc closed) will create edge widths such that the first edge representation of pixels is on the perimeter of the element. All even pixel edge widths (second, fourth, etc.) will fall cumulatively to the inside of the originally established perimeter; all odd pixel edge widths (third, fifth, etc.) will fall cumulatively to the outside of the originally established perimeter. If the element is filled, the edges will be displayed above the associated fill.
- 2. Unpack. Systems receiving closed CGM elements will display edge widths such that the first pixel edge representation lays on the perimeter of the element. All even pixel edges (second, fourth, etc.) fall cumulatively to the inside of the originally established perimeter; all odd pixel edge widths (third, fifth, etc.) fall cumulatively to the outside of the originally established perimeter. If the element is filled, the edges will be displayed above the associated fill.

F. Vector Separation

- 1. Pack. Systems producing circular or elliptical arcs will not select the same or adjacent pixels at the point where the vectors cross the circumference of the arc at full resolution. The most extreme angle allowed is depicted in the figure below.
- 2. Unpack. Systems receiving CGM arc elements where the associated vectors have either the same pixel or are on adjacent pixels on the circumference of the arc will be displayed as a single point. The calculation for this will be done at full resolution.

